as not to create a predominant far vision image and the concave surface being aspherical within the optical zone and the convex surface in the optical zone is one of aspheric, spheric or toric.

31. The contact lens of claim **30**, wherein the convex surface in the optical zone is spheric.

32. The contact lens of claim **30**, wherein the lens body is formed of a HEMA polymer.

33. A continuously variable multi-focal soft contact lens suitable for creating sharp images of far objects, intermediate objects and near objects simultaneously on the retina of a wearer, comprising:

a lens body having a concave surface and a convex surface, said lens having a central optical zone with a continuously varying optical power in the optical zone with the desired distance vision power at the center region of the optical zone and continuously increasing from essentially the optical center point of the lens to the desired near vision power within a region having a dimension less than the maximum pupil opening of the wearer in the dark, the optical power of the lens increasing at a rate so as not to create a predominant far vision image and wherein the power of the lens at the center of the optical zone when soft is in accordance with the formula:

$$P_{w'} = \frac{1}{\frac{r_1 \times \text{Exp}}{n-1} - \frac{t \times \text{Exp}}{n}} - \frac{n-1}{R_2' \times \text{Exp}}$$

$$P_{w'} = \frac{1}{\frac{r_1 \times \text{Exp}}{n-1} - \frac{t \times \text{Exp}}{n}} - \frac{n-1}{r_2' \times \text{Exp}}$$

and wherein the radius of curvature at the center of the concave surface at the center is designated r_2', t is the thickness of the lens at the center, the radius of the anterior surface of the optical zone is r_1, Exp is the expansion factor for the lens material and n is the index of refraction of the lens when soft, all other dimensions in the dry state.

34. The contact lens of claim **33**, wherein the thickness of the lens at the center is no less than about 0.04 mm.

35. The contact lens of claim **33**, wherein the minimum thickness of the junction between the optical zone and the spheric concave surface is about 0.07 mm.

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